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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,958	08/04/2003	Hye Suk Chi	RPS920030032US1	5183
47052	7590	01/26/2006	EXAMINER	
SAWYER LAW GROUP LLP			FERGUSON, MARISSA L	
PO BOX 51418			ART UNIT	
PALO ALTO, CA 94303			PAPER NUMBER	
			2854	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/633,958	CHI ET AL.	
	Examiner	Art Unit	
	Marissa L. Ferguson	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>8/4/03</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,5-12,14-17,19,20-22,24-28,30,32-42 and 43-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Callendrier (US 6,122,978) in view of Matsuda et al. (US Patent 2002/0020959).

Regarding claims 1,10,20,32-34,40-42, 46 and 47, Callendrier teaches an apparatus and method comprising a mounting arrangement (Column 5, Lines 36-40 and Figure 2) and at least one cantilevered roller shaft (20) comprises a distal end and a proximal end for advancing a document (10), wherein the proximal end is coupled to the frame of such that the distal end floats (As shown in Figure 1) and the at least one cantilevered roller shaft is supported only at one end (Figure 1). However, he does not explicitly disclose a bearing coupled to at least one cantilevered roller shaft and a spring coupled to the frame and the bearing. Matsuda et al. teaches an apparatus and methods for feeding sheets with a cantilevered roller (3,4) with a bearing (10) coupled to the shaft (7) and a spring coupled to a plate (element 9a can be referred to as a frame).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention as taught by Callendrier to include

a bearing and spring as taught by Matsuda et al., since Matsuda et al. teaches that it is advantageous to provide a stable/supported relationship as a biasing force acts upon the shaft.

2. Regarding claims 2,6,7,8,12,15-17,22,26-28,35-39 and 43-45, Callendrier teaches the claimed invention and method with the exception of a supported end of the at least one cantilevered roller shaft is supported at two support locations located outside a document path, wherein the document can be appropriately fed and a second cantilevered roller shaft coupled to a frame and wherein a second unsupported end of the second cantilever roller supported at two support locations located outside a document path, wherein the document can be appropriately fed.

Matsuda et al. teaches an apparatus and method, wherein a supported end of the at least one cantilevered roller shaft is supported at two support locations (shaft is supported at main body 5 and supported at plate 9) located outside a document path, wherein the document can be appropriately fed and a second cantilevered roller shaft (7 and Page 3, Paragraph 0052) coupled to the frame (5) and supported at two support locations (shaft is supported at main body 5 and supported at plate 9) located outside a document path, wherein the document can be appropriately fed.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention as taught by Callendrier to include a cantilever roller supported at two locations and a second cantilever roller as taught by Matsuda et al., since Matsuda et al. teaches that it is advantageous to provide a stable feeding device.

3. Regarding claims 3,11 and 21, Callendrier teaches an apparatus and method, wherein a need for a rigid frame that directly supports the unsupported end is eliminated (Figure 1).

4. Regarding claims 5,9,14,19,24 and 30, Callendrier teaches the claimed invention and method with the exception of at least one gimbal roller coupled to a cantilever shaft and coupled to a second roller shaft. Matsuda et al. teaches a gimbal roller (3) that is coupled to the at least one cantilevered roller shaft (shaft supporting feed roller 3 and Page 3, Paragraph 0050) and a gimbal roller (4) coupled to a second roller shaft (7). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention as taught by Callendrier to include a gimbal roller as taught by Matsuda et al., since Matsuda et al. teaches that it is advantageous to provide proper alignment with a roller shaft.

5. Regarding claims 25 and 31, Callendrier teaches the claimed method and invention with the exception of a drive device coupled to the frame and wherein the drive device rotates at least one shaft. Matsuda et al. teaches a drive device (Pages 1 and 2, Paragraphs 0013 and 0014) that rotates a shaft and is coupled to a frame. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention as taught by Callendrier to include a drive device as taught by Matsuda et al., since Matsuda et al. teaches that it is advantageous to provide an efficient power source to properly advance documents.

6. Claims 4,13,18,23 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Callendrier (US 6,122,978) in view of Matsuda et al. (US Patent

2002/0020959) as applied to claim 1, 10 and 20 above, and further in view of Applicant Admitted Prior Art ("AAPA")

Callendrier and Matsuda et al. both teach the claimed apparatus and method with the exception of a frame comprising a main portion and front portion. AAPA teaches a printer with a front portion (54) and a main portion (56, Page 2, Lines 15-16 and Figure 2). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention as taught by Matsuda et al. to include a main portion and front portion of a printer as taught by AAPA, since AAPA teaches that it is advantageous to provide a stable and a reliable feeding device.

#### ***Response to Arguments***

7. Applicant's arguments filed 11/10/05 have been fully considered but they are not persuasive. With regards to applicant's comments on page 14, paragraph 3, the examiner notes that all the elements in Matsuda et al. are connected and/or coupled including the spring, bearing element and frame. If the elements were not coupled together the invention would not function properly. Also, the specification does not explicitly point out or describe how the spring is connected to the bearing and frame elements and figure 6 does not show an interconnection between the frame and bearing. Therefore, the claims will remain rejected over Callendrier in view of Matsuda et al.

***Conclusion***

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

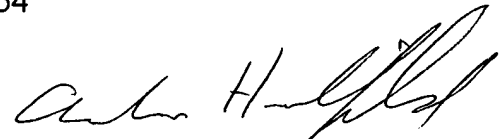
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa L Ferguson whose telephone number is (571) 272-2163. The examiner can normally be reached on (M-T) 6:30am-4:00pm and every other (F) 7:30am-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marissa L Ferguson  
Examiner  
Art Unit 2854

MLF



**ANDREW H. HIRSHFELD**  
**SUPERVISORY PATENT EXAMINER**  
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